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BEFORE THE ARIZONA CORPORATION COMM
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IN THE MATTER OF THE INVESTIGATION
OF REGULATORY AND RATE INCENTIVES
FOR GAS AND ELECTRIC UTILITIES

DOCKET NO. E-00000J-08-0314

G-00000C-08-0314

ENERGY EFFICIENCY WORKSHOP

The Southwest Energy Efficiency Project (SWEEP) appreciates the opportunity to submit comments and information in response to the Staff's questions on energy efficiency filed in this proceeding.

SWEEP has attached the direct testimony of Jeff Schlegel in the Arizona Public Service Company (APS) rate case proceeding (E-01345A-08-0172), which addresses several of Staff's questions. Mr. Schlegel, in his direct testimony:

1. Emphasizes that the total cost (sum of program and customer costs) for energy efficiency savings is two to four cents per lifetime kWh saved, delivered to the customer – significantly less than the cost of conventional generation, transmission, and distribution. P. 4.
2. Cites and agrees with the Western Governor Association finding: "We find that it is feasible to reduce electricity use 20% from projected levels in 2020, and do so cost effectively, through full deployment of best practice policies and programs." P. 5.
3. Recommends achieving three quarters of the 20% savings (or 15% savings by 2020) through utility sector energy efficiency programs, with the remaining 5% savings achieved through other policies including building energy codes and appliance standards. P. 5.
4. Proposes an Energy Efficiency Standard (EES) to (a) achieve energy savings equal to at least 15% of total energy resources needed to meet retail load in 2020; and (b) reduce summer peak demand by at least 15% of total capacity resources needed to meet retail peak demand in 2020. P. 5-6.
5. Estimates that achieving the EES goals (15% by 2020) in the APS service territory is roughly equivalent to achieving annual energy savings of 1.5% of retail energy sales each year over the 12-year period during 2009-2020, with allowance for some continued ramp up in the early years. P. 6.

6. Describes why it is important to have an energy efficiency standard or savings goal, so that the DSM energy efficiency programs and plans are focused primarily on the *effects and impacts* of energy and utility policies in any goal-setting process, and not primarily on the funding or spending levels. Simply spending money, even cost-effectively, should not be the primary focus of future goals for energy efficiency programs. P. 6.
7. Emphasizes that setting an Energy Efficiency Standard (EES) at a level of at least 15% by 2020 will increase energy efficiency program efforts to reach more utility customers and to reduce total customer costs, as well as to acquire the other benefits energy efficiency provides. P. 7.
8. Highlights the importance of reviewing and enhancing DSM programs on a regular basis, to update the programs and program offerings, to capture additional savings from new measures and opportunities, and to reach more customers. P. 7.
9. Recommends program enhancements and expansions that can achieve higher levels of energy savings and reach more customers, including:
 - High Performance and Zero-Net Energy Homes
 - High Performance and Zero-Net Energy Commercial Buildings
 - Home Performance Program Element for Existing Home Programs
 - Additional Funding and Program Enhancements for the Low Income Programs
 - Schools Customer Repayment Program Element
 - Small Business Customer Repayment Program Element. P. 8-9.
10. Proposes program funding levels, funding and cost recovery mechanisms, and an EES implementation plan process to support the EES. P. 10-12.
11. Recommends a two-prong approach to address the issue of utility under-recovery of fixed costs, through a combination of the use of a more current or future test year to reduce regulatory lag (or some other regulatory mechanism to address regulatory lag), and decoupling or some other mechanism to break the link between sales and revenues. SWEEP supports such regulatory mechanisms to address issues related to energy efficiency, i.e., when such mechanisms would be effective in substantially increasing customer energy efficiency and reducing the financial disincentive to utility support of increased energy efficiency. SWEEP is not in favor of decoupling or other mechanisms solely or primarily for the utility to recover authorized fixed costs. Therefore, in SWEEP's view the implementation of decoupling or other mechanisms should be premised on substantial increases in utility support of customer energy efficiency. The objective is to better align the utility financial interest with the customer and public interest. P. 13.
12. Supports performance incentive mechanisms that ensure a substantial majority of the net economic benefits of the programs accrue to customers, and that the vast majority of program expenditures fund program efforts to benefit customers, and not earnings for utilities. P. 13-14.

Thank you for the opportunity to submit these comments.

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9 **BEFORE THE ARIZONA CORPORATION COMMISSION**

10 MIKE GLEASON, CHARIMAN
11 WILLIAM A. MUNDELL
12 JEFF HATCH-MILLER
13 KRISTIN K. MAYES
14 GARY PIERCE

15 IN THE MATTER OF THE APPLICATION
16 OF ARIZONA PUBLIC SERVICE
17 COMPANY FOR A HEARING TO
18 DETERMINE THE FAIR VALUE OF THE
19 UTILITY PROPERTY OF THE COMPANY
20 FOR RATEMAKING PURPOSES, TO FIX A
21 JUST AND REASONABLE RATE OF
22 RETURN THEREON, TO APPROVE RATE
23 SCHEDULES DESIGNED TO DEVELOP
24 SUCH RETURN

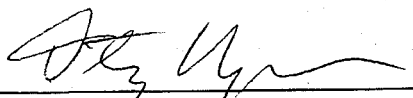
Docket No. E-01345A-08-0172

NOTICE OF FILING TESTIMONY

25 Southwest Energy Efficiency Project ("SWEEP"), through its undersigned
counsel, hereby provides notice that it has this day filed the written direct testimony of
Jeffrey A. Schlegel in connection with the above-captioned matter.

1 DATED this 19th day of December, 2008.

2 ARIZONA CENTER FOR LAW IN
3 THE PUBLIC INTEREST


4 By 
5 Timothy M. Hogan
6 202 E. McDowell Rd., Suite 153
7 Phoenix, Arizona 85004
8 Attorneys for Southwest Energy Efficiency
9 Project

9 ORIGINAL and 13 COPIES of
10 the foregoing filed this 19th day
11 of December, 2008, with:

11 Docket Control
12 Arizona Corporation Commission
13 1200 W. Washington
14 Phoenix, AZ 85007

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15 electronically transmitted
16 this 19th day of December, 2008
17 to:

17 All Parties of Record

18 
19

1 **BEFORE THE ARIZONA CORPORATION COMMISSION**

2
3 **COMMISSIONERS**

4
5 MIKE GLEASON, Chairman
6 WILLIAM A. MUNDELL
7 JEFF HATCH-MILLER
8 KRISTIN K. MAYES
9 GARY PIERCE

10
11
12 IN THE MATTER OF THE APPLICATION OF
13 ARIZONA PUBLIC SERVICE COMPANY FOR
14 A HEARING TO DETERMINE THE FAIR
15 VALUE OF THE UTILITY PROPERTY OF THE
16 COMPANY FOR RATEMAKING PURPOSES,
17 TO FIX A JUST AND REASONABLE RATE OF
18 RETURN THEREON, AND TO APPROVE RATE
19 SCHEDULES DESIGNED TO DEVELOP SUCH
20 RETURN.
21

DOCKET NO. E-01345A-08-0172

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28 **Permanent Rate Case**

29
30
31 **Direct Testimony of**

32
33 **Jeff Schlegel**
34 **Southwest Energy Efficiency Project (SWEEP)**

35
36 **December 19, 2008**
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Direct Testimony of Jeff Schlegel, SWEEP
Docket No. E-01345A-08-0172

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1
2
3 **Introduction**

4 **Q. Please state your name and business address.**

5 A. My name is Jeff Schlegel. My business address is 1167 W. Samalayuca Drive,
6 Tucson, Arizona 85704-3224.
7
8

9 **Q. For whom and in what capacity are you testifying?**

10
11 A. I am testifying on behalf of the Southwest Energy Efficiency Project (SWEET). I am
12 the Arizona Representative for SWEET.
13
14

15 **Q. Please describe Southwest Energy Efficiency Project.**

16
17 A. SWEET is a public interest organization dedicated to advancing energy efficiency as
18 a means of promoting both economic prosperity and environmental protection in the
19 six states of Arizona, Colorado, New Mexico, Nevada, Utah, and Wyoming. SWEET
20 works on state energy legislation, analysis of energy efficiency opportunities and
21 potential, expansion of state and utility energy efficiency programs as well as the
22 design of these programs, building energy codes and appliance standards, and
23 voluntary partnerships with the private sector to advance energy efficiency. SWEET
24 is collaborating with utilities, state agencies, environmental groups, universities, and
25 energy specialists in the region. SWEET is funded primarily by foundations, the U.S.
26 Department of Energy, and the U.S. Environmental Protection Agency.
27
28

29 **Q. What are your professional qualifications for presenting testimony in this**
30 **docket?**
31

32 A. I am an independent consultant specializing in policy analysis, evaluation and
33 research, planning, and program design for energy efficiency and clean energy
34 resources. I consult for public groups and government agencies, and I have been
35 working in the field for over 20 years. In addition to my responsibilities with
36 SWEET, I am working or have worked extensively in many of the leading states that
37 have effective energy efficiency programs, including California, Connecticut,
38 Massachusetts, New Jersey, Vermont, and Wisconsin. In 1997, I received the
39 Outstanding Achievement Award from the International Energy Program Evaluation
40 Conference. I have represented SWEET before the Commission since 2002.
41
42

43 **Q. Please summarize your testimony.**

44
45 A. In my testimony I document the benefits of increasing energy efficiency in the APS
46 service territory and demonstrate that increasing energy efficiency is in the public

1 interest; propose an Energy Efficiency Standard (EES) to set minimum goals for the
2 ratepayer-funded and APS-administered energy efficiency programs; propose a
3 specific EES goal to achieve energy savings equal to at least 15% of total energy
4 resources needed to meet retail load in 2020, and to reduce summer peak demand by
5 at least 15% of total capacity resources needed to meet retail peak demand in 2020;
6 support timely cost recovery for the efficiency programs; oppose lost net revenue
7 recovery proposed by APS; suggest other approaches for addressing the utility
8 disincentive to large scale energy efficiency programs; and recommend revisions to
9 the energy efficiency program performance incentive.

10 11 **The Public Interest: Benefits of Increasing Energy Efficiency**

12 13 **Q. What is the public interest in increasing energy efficiency in the APS Service** 14 **Territory?**

15
16 A. Increasing energy efficiency will provide significant and cost-effective benefits for
17 APS customers (residential consumers and businesses), the electric system, the
18 economy, and the environment. Increasing energy efficiency will save consumers
19 and businesses money through lower electric bills, resulting in lower total costs for
20 customers. Increasing energy efficiency will also reduce load growth, diversify
21 energy resources, enhance the reliability of the electricity grid, reduce the amount of
22 water used for power generation, reduce air pollution and carbon emissions, and
23 create jobs and improve the economy. In addition, meeting a portion of load growth
24 through increased energy efficiency can help to relieve system constraints in load
25 pockets.

26
27 By reducing electricity demand, energy efficiency mitigates electricity and fuel price
28 increases and reduces customer vulnerability and exposure to price volatility. Energy
29 efficiency does not rely on any fuel and is not subject to shortages of supply or
30 increased prices for natural gas or other fuels.

31
32 Energy efficiency is a reliable energy resource that costs less than other resources for
33 meeting the energy needs of customers in the APS service territory. The total cost
34 (sum of program and customer costs) for energy efficiency savings is two to four
35 cents per lifetime kWh saved, delivered to the customer. This is significantly less
36 than the cost of conventional generation, transmission, and distribution. The utility
37 program cost to APS ratepayers is even lower, about two cents per lifetime kWh
38 saved for a comprehensive portfolio of programs designed to serve all customer
39 sectors. As APS has been ramping up its programs in 2005-2008, the energy
40 efficiency savings have been achieved at a cost to APS ratepayers of about one cent
41 per kWh.

1 **Q. What levels of savings might be achieved from energy efficiency programs?**

2
3 A. Leading states are achieving annual energy savings equivalent to or exceeding 1% of
4 retail electricity sales.¹ In addition, recently states have been setting higher goals,
5 some around 1.5 to 2% of retail electricity sales.
6

7 The Western Governors' Association Energy Efficiency Task Force stated that "We
8 find that it is feasible to reduce electricity use 20% from projected levels in 2020, and
9 do so cost effectively, through full deployment of best practice policies and
10 programs."² SWEEP recommends achieving three quarters of the 20% savings (or
11 15% savings by 2020) through utility sector energy efficiency programs, with the
12 remaining 5% savings from other policies including building energy codes and
13 appliance standards.
14
15

16 **Q. Can utility resource managers and regulators count on energy efficiency**
17 **programs to save energy and provide the resources necessary to meet the needs**
18 **of Arizona customers?**
19

20 A. Yes. Experience across the country confirms that energy efficiency programs save
21 energy that resource managers can count on. For example, Dr. David Berry of
22 Western Resource Advocates conducted a statistical analysis of the relationship
23 between state-level energy efficiency program effort and growth in electricity sales
24 between 2001 and 2006 in the United States.³ He found that the higher the utility
25 efficiency program expenditures per capita and the greater the range of other
26 efficiency programs offered, the greater the reduction in the growth of power sales.
27 Application of the portfolio of energy efficiency programs used in the states with the
28 most aggressive programs would have reduced the growth in a state's electricity sales
29 by about 60% relative to the case where no efficiency programs were implemented.
30

31 **The Energy Efficiency Standard (EES):**
32 **Goals for Energy Savings and Peak Demand Reduction**
33

34 **Q. Specifically, what actions should the Commission take to increase energy**
35 **efficiency goals in the APS service territory?**
36

37 A. The Commission should set APS Demand Side Management (DSM) energy
38 efficiency program goals in the form of an Energy Efficiency Standard (EES). The
39 EES should require APS DSM energy efficiency programs to: (1) achieve energy
40 savings equal to at least 15% of total energy resources needed to meet retail load in

¹ ACEEE State Scorecard Report, 2008.

² Western Governors' Association, Clean and Diversified Energy Initiative, *Energy Efficiency Task Force Report*, January 2006, p. v.

³ This study is described in David Berry, "The Impact of Energy Efficiency Programs on the Growth of Electricity Sales," *Energy Policy*, vol. 36 (2008): 3620-3625.

1 2020; and (2) reduce summer peak demand by at least 15% of total capacity resources
2 needed to meet retail peak demand in 2020.

3
4 Meeting the EES goals would provide cost-effective benefits to consumers, the
5 electric system, the economy, and the environment. And meeting the EES goals
6 would contribute substantially to the achievement of the adopted goal of the Western
7 Governors Association (WGA) to increase energy efficiency 20% by 2020.

8
9
10 **Q. What level of energy savings would be needed to achieve the EES goals?**

11
12 Achieving the EES goals (15% by 2020) is roughly equivalent to achieving annual
13 energy savings of 1.5% of retail energy sales each year over the 12-year period during
14 2009-2020, with allowance for some continued ramp up in the early years.

15
16 Assuming the total energy needed to meet the needs of APS retail customers is about
17 42,000,000 MWh in 2020 (based on a SWEEP estimate of the APS business as usual
18 forecast), the sum of cumulative annual energy savings in 2020 would need to be
19 6,300 MWh (15% of 42,000,000 MWh). In order to achieve that level, the energy
20 efficiency programs would need to save on average about 525,000 MWh each year in
21 the twelve years from 2009 through 2020. SWEEP recommends annual energy
22 savings of at least 400,000 MWh in the early years, growing to about 600,000 MWh
23 per year after the first 2-3 years of the 2009-2020 period.

24
25
26 **Q. Are the goals of the EES reasonable and achievable?**

27
28 A. Yes, the proposed EES goals are both reasonable and achievable. The goals are
29 reasonable and achievable considering the low level of energy efficiency activities in
30 Arizona in the past, the successful ramp up and performance of energy efficiency
31 efforts in the early years, and the energy efficiency program performance in leading
32 states.

33
34
35 **Q. Why should the EES goals be based on savings and effects rather than
36 spending?**

37
38 A. SWEEP believes that it is important to focus primarily on the *effects and impacts* of
39 energy and utility policies for setting goals, not primarily on the funding or spending
40 levels. Simply spending money, even cost-effectively, should not be the primary
41 focus of future goals for energy efficiency programs.

1 **Q. Should the EES goals be adopted in this proceeding?**

2
3 A. It is essential to set goals to implement Commission policy, in this proceeding. Clear,
4 multi-year goals help utilities, stakeholders, and customers understand how the future
5 electric system will meet future customer load, in a manner consistent with the
6 policies of the Commission. Therefore, it is essential to have a goal for APS to
7 achieve, with a clear commitment and explicit requirement, and to increase that goal
8 beyond what APS has achieved and was ordered to achieve in the past. Most
9 importantly, it is essential to increase energy efficiency efforts to reach more APS
10 customers and to reduce total customer costs, as well as to acquire the other benefits
11 energy efficiency provides.
12

13
14 **Energy Efficiency Program Enhancements and Expansions**
15

16 **Q. Is SWEEP proposing additional DSM energy efficiency programs to achieve the**
17 **EES goals?**
18

19 A. The existing Commission-approved DSM energy efficiency programs should be
20 expanded to achieve the goals of the EES. While some additional DSM energy
21 efficiency programs may be needed to achieve the EES goals, and may also be
22 valuable for providing additional benefits to APS customers, the primary mechanism
23 for achieving the EES goals should be the expansion of existing programs already
24 approved by the Commission.
25

26
27 **Q. How would SWEEP expand the programs and increase program savings?**
28

29 A. SWEEP recommends several DSM program enhancements to update and expand the
30 existing programs, to capture additional savings from new measures and
31 opportunities, and to reach more customers. SWEEP recommends that several
32 program enhancements be added as *program elements* within the existing
33 Commission-approved DSM programs, and not as new programs.
34

35 It is important to review and refresh DSM programs on a regular basis, to update the
36 programs and program offerings, to capture additional savings from new measures
37 and opportunities, and to reach more customers. For example, there are opportunities
38 to achieve higher savings per home in the Residential New Construction program by
39 offering a second tier or level of energy efficiency within the existing program for
40 high performance/very energy efficient homes, which, when combined with one or
41 more renewable energy systems, can result in zero-net energy homes. This is
42 important for two reasons. First, there are builders, developers, and homebuyers who
43 are considering zero-net energy and high performance homes, and the DSM programs
44 should encourage these homes to provide more savings and net benefits. Second, the
45 recent national agreement for the 2009 IECC building energy code to be about 15%
46 more energy efficient than the 2006 IECC means that new homes currently

1 considered to be energy efficient, including Energy Star homes (15% more energy
2 efficient than the 2006 IECC), will simply be equivalent to the base building energy
3 code once the 2009 IECC is adopted by local municipalities in Arizona.
4

5 It is essential to plan ahead and develop the performance level for future energy
6 efficient homes now, as a high performance second tier within the DSM program.
7 Then the high performance second tier of today's DSM program will become the first
8 energy efficiency tier in the program in the near future.
9

10 Likewise, a second tier for high performance commercial buildings should be
11 developed and offered in the Non-Residential New Construction program, to address
12 national and regional initiatives for more energy efficient and green buildings, such as
13 Architecture 2030, the New Buildings Institute Advanced Buildings, and higher
14 levels of LEED.
15

16 The most opportune time for builders, developers, and designers to consider
17 significant changes and upgrades to their building designs and production systems is
18 when the housing and construction industry is depressed. Now is the time to work
19 with the building industry to develop the high performance buildings of the future.⁴
20 The second tier, high performance program elements should be developed, approved
21 by the Commission, and implemented as soon as possible, so that high performance
22 and zero-net energy building projects can be developed now.⁵
23
24

25 **Q. Does SWEEP have some specific program enhancements in mind, which could**
26 **be added as program elements within existing Commission-approved DSM**
27 **programs?**
28

29 **A. Yes, SWEEP recommends the following program enhancements be added as**
30 ***program elements* (not new programs) within the existing Commission-approved**
31 **DSM programs at this time.**
32

33 High Performance and Zero-Net Energy Homes

34

35 APS should build on its current residential energy efficiency programs and implement
36 a second tier, high performance home program element within the Residential New
37 Construction program, i.e., new homes that are at least 30% more energy efficient
38 than the 2006 IECC building energy code. This high performance home program
39 element should serve as the energy efficiency component of an integrated zero-net
40 energy home effort in Arizona (when combined with the renewable energy
41 component).

⁴ SWEEP first recommended DSM program support for zero-net energy homes to the Commission on April 4, 2006 in Docket No. E-01345A-05-0477 (the APS DSM program docket), during Commission review of the APS residential DSM programs.

⁵ APS and SWEEP have been discussing and developing a second tier, high performance home program element for several months. Therefore, APS should be able to file a proposal and report very soon.

1 High Performance and Zero-Net Energy Commercial Buildings

2
3 APS should build on its current non-residential energy efficiency programs and
4 develop a second tier, high performance commercial building program element within
5 the Non-Residential New Construction program to provide DSM program support of
6 zero-net energy commercial buildings, coordinated with renewable energy efforts –
7 similar to the residential high performance home program element above.

8
9 Home Performance Program Element for the Existing Home HVAC Program

10
11 APS should build on its current residential energy efficiency programs and prepare a
12 proposed Home Performance program element within the residential Existing Home
13 HVAC program focused on capturing building shell, air sealing, duct sealing, and
14 other opportunities for energy savings in existing homes, in addition to the savings
15 from HVAC systems.

16
17 Additional Funding and Program Enhancements for the Low Income Program

18
19 APS should review its current low income program, review the effectiveness of the
20 program and program elements, review the capability of the program and its partners
21 to reach additional low income customers, and propose a budget increase and
22 program enhancements identified during the review. The DSM Collaborative
23 members, including Staff, as well as the low income and community action agencies,
24 should participate in the review of the low income program.

25
26 Schools Customer Repayment Program Element

27
28 APS should develop a “customer repayment” element, possibly including on-the-bill
29 repayment, for schools. In this program element, APS would pay for 100% of the
30 measure installation cost up front. The school would receive a financial incentive
31 (equivalent to a rebate amount) and the remainder of the cost would be repaid by the
32 school on a monthly basis, using the energy cost savings.

33
34 Small Business Customer Repayment Program Element

35
36 APS should develop a “customer repayment” element, possibly including on-the-bill
37 repayment, for small businesses, similar to the element proposed for schools above.
38 The program element should include direct installation services provided by vendors
39 and contractors.

1 **Funding to Support the Energy Efficiency Standard EES Goals**
2

3 **Q. What level of funding should be authorized to achieve the goals of the EES and**
4 **secure the associated benefits?**
5

6 A. The Commission should authorize adequate funding to achieve the goals of the EES.
7 SWEEP estimates that energy efficiency program funding of \$0.0025 per kWh of
8 retail energy sales (2.5 mills) will be necessary to ramp up and expand the energy
9 efficiency programs in 2010-2011 to get on track to achieve the EES goals by 2020.
10 By 2011, total DSM energy efficiency funding should be increased from about \$25
11 million currently (the estimated spending in 2008) to \$75 million. Annual funding
12 should be increased to at least \$50 million in 2010, to support the continued ramp up
13 of the programs.
14

15 Inadequate funding of DSM energy efficiency programs and the resulting under-
16 achievement of cost-effective energy efficiency would lead to higher total costs for
17 customers.
18
19

20 **Development of an EES Implementation**
21 **Plan for the APS Service Territory**
22

23 **Q. Should an EES implementation plan for the APS service territory be developed?**
24

25 A. Yes. APS should file an implementation plan to achieve the goals of the EES,
26 covering the 2009-2020 program years. The EES Implementation Plan should be
27 developed by APS with input from and review by the Collaborative DSM Working
28 Group, which includes Commission Staff and interested parties. The EES
29 Implementation Plan would be reviewed by Staff, and then be reviewed and approved
30 by the Commission prior to implementation.
31

32 Since Staff will participate directly in the development of the EES Implementation
33 Plan as part of the DSM Collaborative Working Group, the Commission should
34 provide up to 60 days for Staff review of the EES Implementation Plan after it is filed
35 by APS. The expansion of approved DSM programs should proceed as a result of the
36 order in this proceeding, and should not be postponed for the development, review,
37 and Commission approval of the EES Implementation Plan.
38

39 The EES Implementation Plan should include the historical DSM program results,
40 and should include a forecast for the expansion of the existing Commission-approved
41 DSM energy efficiency programs.
42
43
44
45
46

DSM Funding and Cost-Recovery Mechanisms

Q. Which DSM funding and cost-recovery mechanisms should be used to provide the additional DSM funding that will be needed to achieve the goals of the EES?

A. In general, energy efficiency funding and cost recovery could be accomplished through funding in base rates, a DSM adjustment mechanism, a system benefits surcharge, amortizing or capitalizing the DSM investments over time, or a combination of funding mechanisms.

For APS, the Commission previously authorized a two-part DSM funding and cost-recovery mechanism, with one portion of the DSM funding in base rates (\$10 million) and the second portion of the DSM funding recovered using a DSM adjustment mechanism (for the amount in excess of the base rate DSM allowance).

The two-part approach is adequate for the current level of authorized DSM funding. The Commission could choose to expand the current two-part approach or build upon it by using an additional funding mechanism for some or all of the additional funding needed to meet the goals of the EES.

Q. Are there DSM funding and cost-recovery mechanisms that would reduce the rate impacts of the DSM program funding increase in the early years of the EES?

A. Yes. The Commission could choose to amortize or capitalize a portion of the DSM expenditures, similar to how investments in power plants are recovered through customer rates over time, thereby reducing the customer rate impacts of DSM programs in the early years of the EES. For example, the Commission could spread the additional DSM costs to ratepayers across several years (e.g., 5 years) in a manner that acknowledges that the energy efficiency benefits are achieved over several years.

Q. Could a combination of DSM funding and cost-recovery mechanisms be used?

A. Yes. For example, the APS DSM energy efficiency funding could consist of a portion in base rates, a portion recovered through the DSM adjustment mechanism, and a portion capitalized or amortized over five years or more.

Q. Does SWEEP have a preference for a particular funding and cost-recovery mechanism in this case?

A. SWEEP is open to considering any of the above funding and cost-recovery mechanisms and combinations. SWEEP does not have a strong preference for one particular mechanism. However, any funding mechanism or combination of

1 mechanisms should have, at a minimum, the same advantages of the two-part base
2 rate and DSM adjustment mechanism approach in place at APS now, including but
3 not limited to the flexibility to adjust funding outside of a rate case to meet customer
4 demand for cost-effective, Commission-approved DSM services, and the ability to
5 increase DSM funding above a base amount in the event that additional DSM
6 programs are approved by the Commission between rate cases. In addition, SWEEP
7 believes it would be best to build on the existing funding mechanisms and use a
8 combination of mechanisms, as in the examples above, rather than implementing a
9 new mechanism for 100% of the DSM funding.

10 11 12 **Removing Disincentives to Large Scale Energy Efficiency Programs**

13
14 **Q. In Mr. Pickles' direct testimony (p. 22) APS proposes that it recover its program**
15 **costs in the same year that they are spent and that this amount be based on**
16 **projected DSM spending for both approved and pending programs, with a true-**
17 **up to actual spending and recoveries in the following year. Do you support this**
18 **proposal?**

19
20 **A. Yes. As energy efficiency programs increase in scale, APS should be assured that it**
21 **will recover its costs in a timely manner. Delays in cost recovery may be a**
22 **disincentive for APS to increase its efficiency program effort.**

23
24
25 **Q. Mr. Pickles also indicates (p. 7) that under traditional ratemaking, utilities that**
26 **administer large scale energy efficiency programs see a decline in revenue that**
27 **results in the utility not fully recovering its fixed costs through rates. He also**
28 **implies that in jurisdictions which do not address the recovery of lost revenues to**
29 **cover fixed costs there is a disincentive to utilities to engage in large scale energy**
30 **efficiency programs. Do you agree that this is an issue?**

31
32 **A. SWEEP agrees that under-recovery of fixed costs is an issue. However, SWEEP does**
33 **not support APS' proposed remedy.**

34
35
36 **Q. APS proposes to collect the otherwise unrecovered fixed costs due to DSM**
37 **programs through an adjustment for lost net revenues. The APS-proposed**
38 **adjustment recovers the difference between average retail rates and average**
39 **variable costs for fuel and purchased power (Pickles direct testimony, p. 21). In**
40 **particular, Mr. Pickles states (p. 21, lines 19-24) that APS proposes to "collect**
41 **otherwise un-recovered fixed costs due to implemented DSM programs based on**
42 **the MWh impacts in the previous year priced at the average retail rate less**
43 **average variable costs for fuel and purchased power. These lost fixed cost**
44 **contributions should include the impacts of all DSM programs since the last rate**
45 **case but still within the life of the DSM measures." Does SWEEP support APS'**
46 **proposal to recover what amounts to lost net revenues?**

1 A. No. SWEEP does not support lost net revenue recovery in general and SWEEP does
2 not support APS' proposal specifically. While the recovery of otherwise unrecovered
3 fixed costs removes a disincentive to APS' willingness to expand its energy
4 efficiency programs significantly, there are several major disadvantages to APS'
5 proposal.

6
7
8 **Q. What does SWEEP recommend instead?**
9

10 A. SWEEP recommends a two-prong approach to address this issue, through a
11 combination of the use of a more current or future test year to reduce regulatory lag,
12 and decoupling or some other mechanisms to break the link between sales and
13 revenues.

14
15 Regarding the second prong, SWEEP supports decoupling mechanisms to address
16 issues related to energy efficiency, i.e., when such mechanisms would be effective in
17 substantially increasing customer energy efficiency and reducing the financial
18 disincentive to utility support of increased energy efficiency. SWEEP is not in favor
19 of decoupling solely or primarily as a mechanism for the utility to recover authorized
20 fixed costs. Therefore, in SWEEP's view the implementation of decoupling is
21 premised on substantial increases in APS support of customer energy efficiency, and
22 the decoupling mechanism would reduce the financial disincentive to the utility of
23 such increased energy efficiency.

24
25 Commission approval of a decoupling mechanism, combined with Commission direct
26 action to reduce regulatory lag (e.g., addressing the lagged effects of historic test
27 years), would remove the financial disincentive and would increase APS support for
28 energy efficiency. Increased APS support for energy efficiency would include
29 increased DSM programs, and it should also include increased support of customer
30 education and awareness efforts, energy efficient appliance standards, building
31 energy codes, and state or federal legislation to increase energy efficiency. In other
32 states, utility enthusiasm and support for energy efficiency has increased dramatically
33 in utilities where decoupling has been implemented.

34
35
36 **Performance Incentives for Energy Efficiency Program Administration**
37

38 **Q. APS, in Mr. Pickles direct testimony (p. 21), recommends that it be permitted to**
39 **earn an increased performance incentive by removing the existing cap on APS'**
40 **performance incentive (currently set at 10% of program expenditures). APS**
41 **proposes to retain the current sharing relationship between ratepayers (who**
42 **receive 90% of the net benefits of the programs) and shareholders (who receive**
43 **10%). Does SWEEP support APS' proposal?**
44

45 A. SWEEP does not support *removing* the cost cap on the performance incentive.
46 SWEEP recommends increasing the cap to 20% of program expenditures, which

1 would allow APS to earn a larger portion of the share of net benefits (10%) allocated
2 to APS (currently the cost cap results in APS actually earning a smaller portion of the
3 10% of net benefits). It is important to ensure that a substantial majority of the net
4 benefits of the program accrue to customers, and that the vast majority of program
5 expenditures fund program efforts to benefit customers, not earnings for APS.
6
7

8 **Q. Does SWEEP have any recommendations or proposals for revising the**
9 **performance incentive?**
10

11 A. SWEEP is developing a revised energy efficiency program performance incentive,
12 which SWEEP will file in the rate design portion of this proceeding.
13
14

15 **Other DSM and Pricing Approaches**

16

17 **Q. Are there other approaches to achieving energy savings and peak demand**
18 **reductions that SWEEP recommends?**
19

20 A. Yes. SWEEP supports complementary approaches such as demand response and load
21 management programs to encourage peak load reductions, and pricing and rate
22 designs to encourage energy efficiency and reduce peak demand. SWEEP supports
23 these approaches as complements to effective energy efficiency policies and
24 programs, not as replacements for cost-effective utility DSM energy efficiency
25 programs.
26
27

28 **Other DSM Issues**

29

30 **Q. Are there other DSM and energy efficiency issues that require Commission**
31 **attention and action?**
32

33 A. Yes, SWEEP plans to address several other generic or over-arching DSM-related
34 issues before the Commission, including the avoided costs used for cost-effectiveness
35 analysis of the measures and programs, the program and portfolio planning process,
36 the process for regulatory review, and reporting of DSM programs. SWEEP plans to
37 address these issues in other forums before the Commission.
38
39

40 **Q. Does that conclude your direct testimony?**
41

42 A. Yes.